Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20544

In the Matter of:	
Implementing Kari's Law and Section 506 of RAY BAUM'S Act	PS Docket No. 18-261
Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems	PS Docket No. 17-239

REPLY COMMENTS OF SORENSON COMMUNICATIONS, LLC
REGARDING E911 FOR VIDEO RELAY SERVICES

Sorenson Communications, LLC ("Sorenson") and CaptionCall, LLC ("CaptionCall), the providers of the majority of Video Relay Service ("VRS") and Internet Protocol Captioned Telephone Service ("IP CTS") minutes, respectively, in the United States, submit these reply comments on the Federal Communications Commission's (the "Commission") NPRM to implement Kari's Law and RAY BAUM'S Act. [1] Sorenson and CaptionCall support the Commission's goal of ensuring that PSAPs can dispatch First Responders to an accurate location as quickly as possible.[2] Accurate and timely response in the case of an emergency is critical, particularly for more vulnerable populations such as TRS users. To this end, Sorenson and

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1 *Implementing Kari's Law and Section 506 of RAY BAUM'S Act and Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, Notice of Proposed Rulemaking, FCC 18-132, PS Docket Nos. 18-261 & 17-239 (rel. Sept. 26, 2018) ("*Kari's Law NPRM*").

2 Comments of Sorenson Communications, LLC at 1 & 3, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("Sorenson Comments").

CaptionCall reiterate their goal of ensuring that TRS users can dial 911 and a Public Safety Answering Point ("PSAP") can quickly and accurately locate every 911 caller.[3]

Sorenson and CaptionCall agree with Hamilton that the public safety rules being considered in this proceeding are largely inapplicable to IP CTS.[4] As the pending draft NPRM has recognized, IP CTS providers generally are not involved in call routing, and IP CTS Communications Assistants ("CAs") do not have a means of speaking directly to the parties on the call or to a PSAP operator.[5] Thus, IP CTS providers are not generally able to ask a caller for location information or to use such information in an actionable form, even if they were somehow able to get it. For this reason, the Commission is considering granting pending requests for waivers of the TRS 911 rules with respect to IP CTS,[6] as well as specifically tailored call handling requirements for those 911 calls that IP CTS providers do route. Any dispatchable location rules adopted in this proceeding thus should be harmonized with the targeted

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3 *Id.* at 1. (referencing the Commission's stated public safety goals in *Kari's Law NPRM*.)

4 Comments of Hamilton Relay, Inc., PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("Hamilton Comments").

5 *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Draft Report and Order, Further Notice of Proposed Rulemaking, and Order, FCC-CIRC1901-04, CG Docket Nos. 13-24 & 03-123, ¶¶ 9, 33 (rel. Jan. 3, 2019) ("*IP CTS 911 NPRM*"). ("For the predominantly used form of IP CTS, where the voice connection for a call is established using an ordinary wireline telephone service and there is a separate Internet connection made solely for the IP CTS user to receive captions, the telephone company or voice-over-Internet Protocol (VoIP) service provider is responsible for delivering 911 calls and location information to emergency authorities.").

6 *See* Innocaption, Inc., Petition for Waiver of Rule, CG Docket No. 03-123 (filed July 1, 2015); CaptionCall, LLC, Petition for Declaratory Ruling or, in the Alternative, Waiver with Respect to § 47 C.F.R. 64.605(a), and for Clarification with Respect to 47 C.F.R. § 64.605(a), CG Docket Nos. 13-24 & 03-123 (filed May 18, 2015); Hamilton Relay, Petition for Waiver, CG Docket Nos. 13-24 & 03-123 (filed Feb. 29, 2016); Sprint Corporation, Petition for Waiver, CG Docket Nos. 13-24 & 03-123 (filed Oct. 15, 2018).

requirements under consideration in the IP CTS 911 NPRM, and must reflect the limited role of CAs across IP CTS calls.[7]

With respect to VRS and IP CTS, the record in this proceeding generally supports the NPRM's conclusion that TRS providers will need flexibility in implementing dispatchable location solutions and the ability to fall back to Registered Location when dispatchable is not feasible.[8] For example, with respect to 911 and E911 service more generally, Microsoft noted that ensuring flexibility facilitates innovation while allowing the provider to make available the best information possible, which may not always be dispatchable address.[9] Furthermore, the record supports Sorenson's position that the varied environments in which VRS can be provided—from essentially fixed to nomadic to mobile—each presents different technical challenges to implementing dispatchable location or automatic geolocation capabilities. The same is true for IP CTS calls for which the IP CTS provider is involved in routing. Web- and wireless-based captioning services generally operate "over the top" (utilizing the over-the-top voice services of an underlying provider), and thus are as nomadic or mobile as the underlying device and service on which the captioning service is delivered. Thus, as with VRS, different IP CTS calls present different technical challenges to implementing dispatchable location or automatic geolocation capabilities. And it is important to remember that it is the non-TRS over-

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7 *See IP CTS 911 NPRM* ¶ 11 ("[W]ith IP CTS, the CA hears the voice of the hearing party but does not speak to that party, and provides captions to, but does not hear, the IP CTS user. Due to such limited, one-way communication, it is impractical to involve an IP CTS CA in collecting and forwarding caller information and in reconnecting disconnected calls.").

8 *Kari's Law NPRM* ¶ 81.

9 Comments of Microsoft Corporation at 10–12, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("Microsoft Comments") (proposing that the Commission adopt rules ensuring that the "best available location" is quickly reported to the PSAP "starting with the most reliable/accurate data that is available and backing that up with less reliable information.").

the-top services that will drive the technological development of dispatchable location and autolocation solutions. If solutions are not technically feasible for over-the-top VoIP services, whether mobile or nomadic, they will not be technically feasible for internet-based TRS providers involved in call routing. Indeed, even non-TRS commenters agree that the Commission should recognize that providers will need flexibility to implement dispatchable or other high accuracy location solutions, including the ability to report a Registered Location when real-time dispatchable location or high accuracy geolocation data is not available.[10]

For both nomadic and essentially fixed environments, whether for VRS, IP CTS or hearing voice services, the comments confirm that a service provider largely must rely on the consumer accurately to report location.[11] Over-the-top service providers are unable to obtain a user's location automatically from the user's wireline ISP, such as a cable or local telephone company. As West explains, nomadic VoIP providers often cannot reliably detect whether a user has changed locations and are thus dependent on end user updates.[12] Device-based location is available only for some devices, and in any case the consumer must authorize use of device-based location for VRS or IP CTS in order for the respective provider to be able to receive the device's location estimates.

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[10] *See* Comments of West Safety Services, Inc. at 9–11, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("West Comments"); Comments of RingCentral, Inc. at 10, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("RingCentral Comments"); Comments of the Telecommunications Industry Association at 11–12, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("TIA Comments"); Microsoft Comments at 11–12; Comments of the Alliance of Telecommunications Industry Solutions at 3, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("ATIS Comments").

[11] Comments of VON Coalition at 5–8, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("VON Coalition Comments").

[12] West Comments at 13–14.

Various parties also make clear, as did Sorenson, that dispatchable address in many cases will not be available for mobile service. What will be available to the mobile service provider is geolocation, such as from device-based location (including GNSS when the device has GNSS capabilities and the consumer has enabled them).[13] Sorenson agrees with APCO that it would be preferable if dispatchable location could be provided;[14] however, nothing in the record suggests that it is any more reliable for a service provider to convert x,y,z coordinates into street addresses than it is for the PSAP. Requiring a service provider to convert x,y,z data does not improve the reliability of the location estimate—and in fact can introduce errors through the conversion process. Moreover, critical information such as search area could be lost through such conversions.[15] As ATIS recommends, x,y,z needs to be a permissible alternative to dispatchable location, and may be necessary as location solutions evolve technologically.[16]

As West and the VON Coalition note, the technology for automatically locating mobile users is advancing rapidly and the technology for locating nomadic VoIP subscribers is improving, though it is still not reliable in every instance.[17] As that important technology develops, Sorenson and CaptionCall will continue to incorporate it into their platforms for calls that they are responsible for routing. Sorenson and CaptionCall, however, reemphasize that technology in this area will be driven by CMRS and over-the-top mobile VoIP providers, who

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[13] Comments of Verizon at 6–8, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("Verizon Comments"); Microsoft Comments at 11.

[14] Comments of APCO International at 5, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("APCO Comments"); Microsoft Comments at 11–12.

[15] ATIS Comments at 3.

[16] *Id.*

[17] West Comments at 11–14; VON Coalition Comments at 7–8. *See also* RingCentral Comments at 11.

have hundreds of millions more users than VRS and IP CTS providers.[18] Therefore, it is important that the Commission not implement any rules that would "impair the development of improved [TRS] technology"[19] by requiring TRS providers to provide location data that cannot be feasibly obtained from the platform and the customer.[20]

As Cisco observes, the National Emergency Address Database ("NEAD") is promising as a potential long-term solution for locating end users of VoIP services.[21] Sorenson and CaptionCall agree with Cisco that the NEAD, as configured, is designed for wireless carriers, not over-the-top providers, who may not be able to access the NEAD because they operate in the user plane, not the control plane.[22] This further supports the flexibility proposed in the NPRM, as it is not clear when or if the NEAD will be modified to be suitable for use by entities other than CMRS providers.[23] Sorenson and, when applicable, CaptionCall will continue to provide a dispatchable location or a high-accuracy geolocation whenever possible, and will fall back on the user's Registered Location when no real-time dispatchable location or high-accuracy geolocation is available.

Finally, Hamilton and the VON Coalition also note the importance of being able to use an emergency call center as a back-up, especially for nomadic and mobile applications, in

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18 Sorenson Comments at 2.

19 47 U.S.C. § 225(d)(2).

20 As Hamilton Relay observes, these same concerns apply to IP CTS when it is handling 911 call routing and E911 information. Hamilton Comments at 5–6.

21 Comments of Cisco Systems, Inc. at 20–21, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("Cisco Comments").

22 *Id.*

23 *Kari's Law NPRM* ¶ 81.

combination with a customer provided Registered Location.[24] As with Sorenson's use of the West ECRC as a back-up to its other location methods, specifically permitting this use will help ensure that 911 calls can be routed to the correct PSAP as often as possible, minimizing the need for PSAPs to transfer calls to another PSAP.

Sorenson and CaptionCall strongly support the Commission's efforts to ensure that First Responders receive the best possible location data with every 911 call. As noted, however, the proposed rules should be revised in order to be technically feasible for VRS and IP CTS across the range of their respective operating environments, including mobile applications.

Respectfully submitted,

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[24] Hamilton Comments at 3–4; VON Coalition Comments at 5.